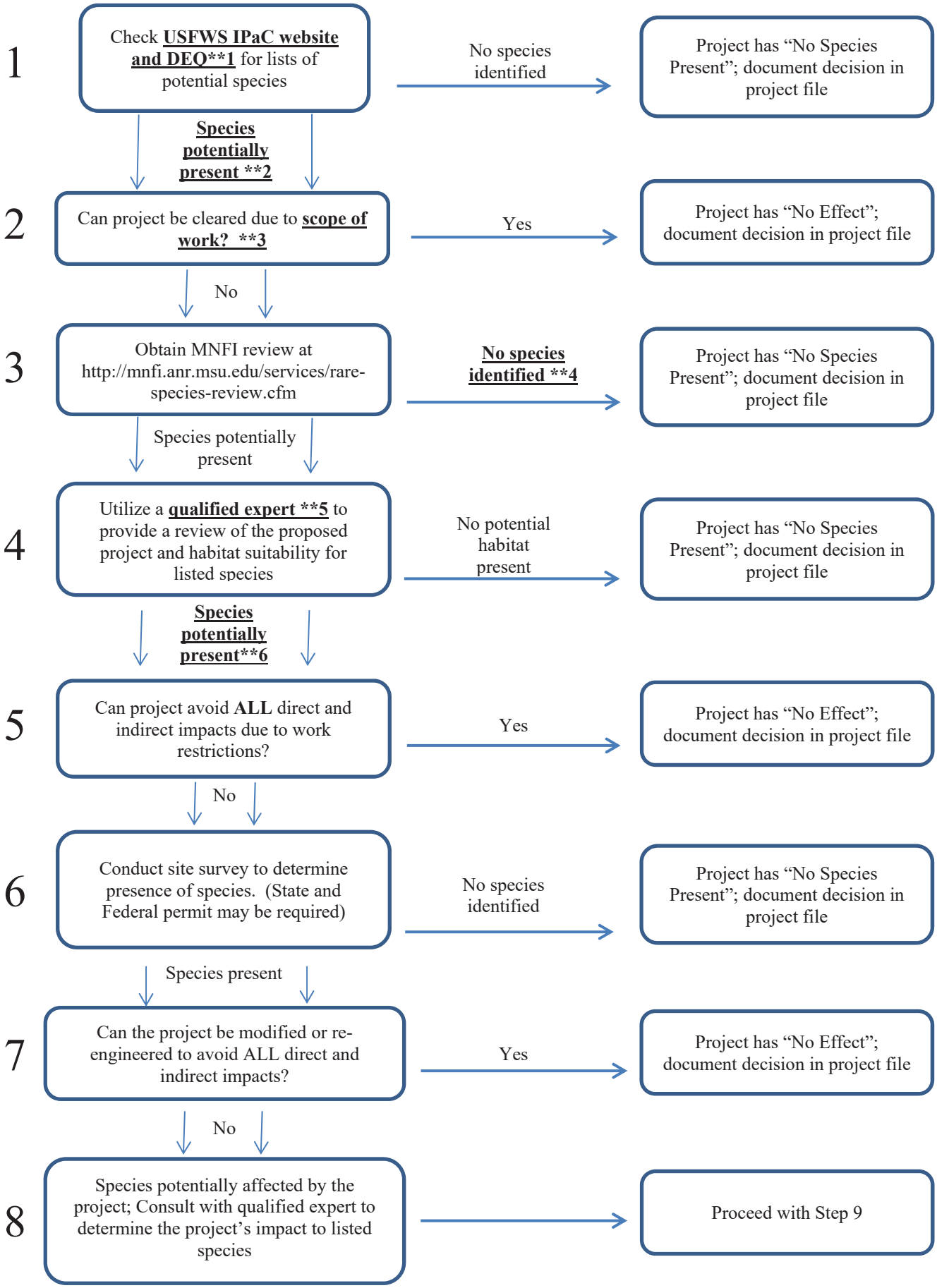
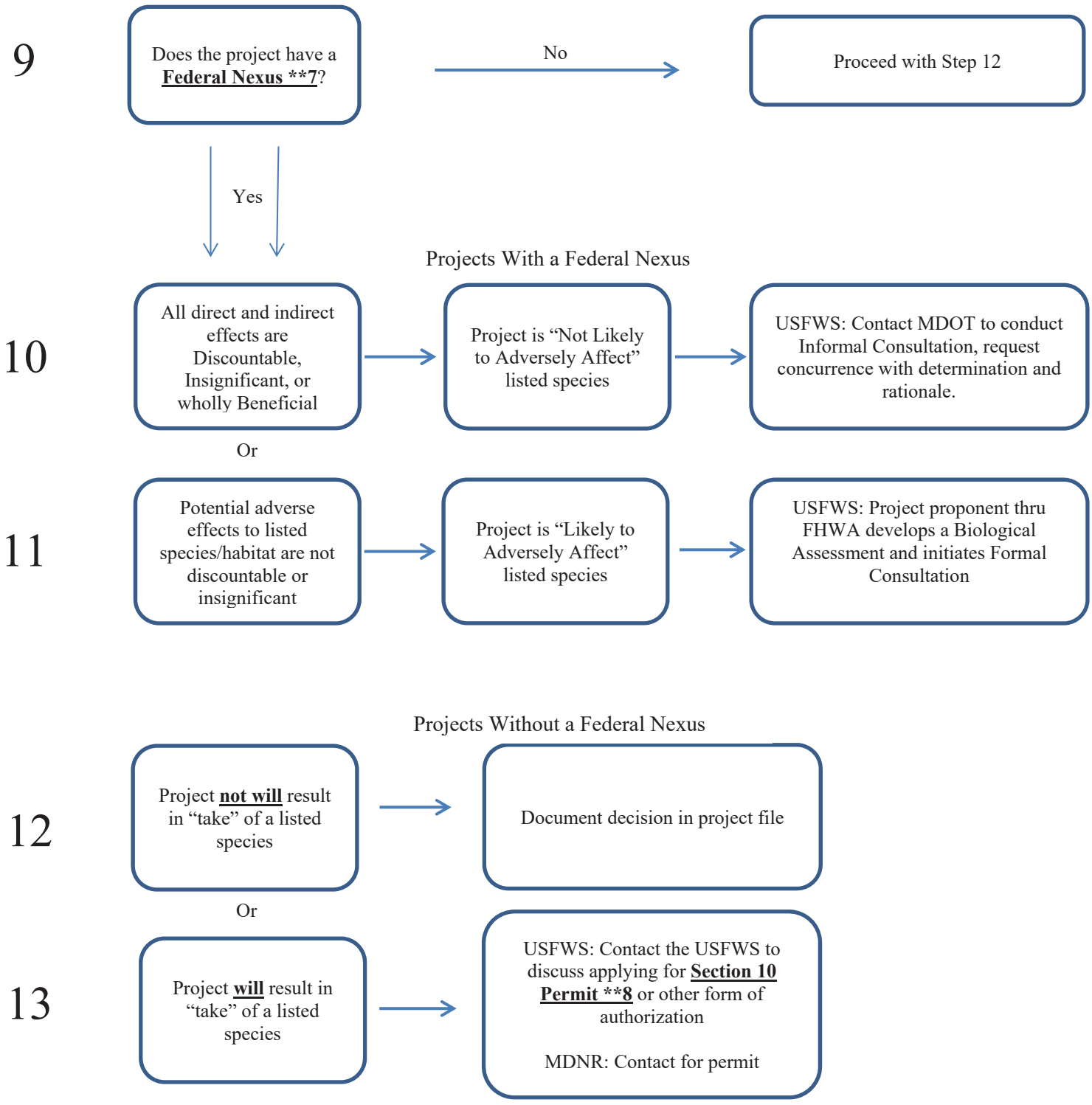
Local Agency Threatened & Endangered Species Review Process

Updated January 2019

The following process is for all Threatened & Endangered Species. Local Agencies should follow this for all projects that utilize federal or state funding.


1
Check USFWS IPaC website and DEQ**1 for lists of potential species
No species identified
Project has "No Species Present"; document decision in project file
Species potentially present **2
2
Can project be cleared due to scope of work? **3
Yes
Project has "No Effect"; document decision in project file
No
3
Obtain MNFI review at http://mnfi.anr.msu.edu/services/rare-species-review.cfm
No species identified **4
Project has "No Species Present"; document decision in project file
Species potentially present
4
Utilize a qualified expert **5 to provide a review of the proposed project and habitat suitability for listed species
No potential habitat present
Project has "No Species Present"; document decision in project file
Species potentially present**6
5
Can project avoid ALL direct and indirect impacts due to work restrictions?
Yes
Project has "No Effect"; document decision in project file
No
6
Conduct site survey to determine presence of species. (State and Federal permit may be required)
No species identified
Project has "No Species Present"; document decision in project file
Species present
7
Can the project be modified or re-engineered to avoid ALL direct and indirect impacts?
Yes
Project has "No Effect"; document decision in project file
No
8
Species potentially affected by the project; Consult with qualified expert to determine the project's impact to listed species
Proceed with Step 9



For additional information on conducting reviews and determinations for federally listed species see the USFWS technical assistance website at https://www.fws.gov/midwest/Endangered/section7/s7process/index.html.

This process is only for determining effects of the action to listed threatened or endangered species. This process does not exempt the project proponents from other protected resource reviews such as wetland impacts, migratory birds, bald eagles, etc.

Footnote

**1 – USFWS IPaC website: https://ecos.fws.gov/ipac/
To request a preliminary review of project related special interests (such as T&E Species) from MDEQ, submit the form called 'Transportation Service Request – T&E Species & SHPO Map/Data Review (Preliminary Desktop Review)' in MiWaters

**2 – See Appendix A for species specific review process (Northern Long-eared Bat, Indiana Bat, Eastern Massasauga)

**3 – See Appendix B for list of exempt work types

**4 – Some species may be considered present even with a negative result from MNFI (e.g. Indiana Bat, Northern Long-Eared Bat)

**5 – A Qualified Expert is someone who has knowledge, skill, education, experience, or training and is considered a reasonable expert for a specific species. Documentation should be included in the project file.

**6 – Notify the USFWS of the project and species potentially present

**7 – A project has a federal nexus if a Federal agency authorizes, funds, or carries out any part of the proposed project

**8 – A Section 10 permit for potential impacts to threatened and endangered plants may not be necessary under certain circumstances. Contact USFWS for further review.

Definitions

Beneficial – effects are contemporaneous positive effects without any adverse effects to individuals of the species.

Discountable – effects are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur.

Insignificant – effects relate to the size of the impact and should never reach the scale where take occurs.

Likely to Adversely Affect – if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effect is not: discountable, insignificant, or beneficial. In the event the overall effect of the proposed action is beneficial to the listed species, but is also likely to cause some adverse effects, then the proposed action "is likely to adversely affect" the listed species. If incidental take is anticipated to occur as a result of the proposed action, an "is likely to adversely affect" determination should be made. An "is likely to adversely affect" determination requires the initiation of formal section 7 consultation.

No Effect – when the action agency determines its proposed action will not affect a listed species or designated critical habitat.

Not Likely to Adversely Affect – when effects on listed species are expected to be discountable, insignificant, or completely beneficial.

Take – to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct. [ESA §3(19)] **Harm** is further defined by FWS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. **Harass** is defined by FWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering. [50 CFR §17.3]

Attachment
A

MDOT LOCAL AGENCY PROGRAM

CONSIDERATIONS FOR DETERMINING THE EFFECT OF FEDERALLY FUNDED PROJECTS ON NORTHERN LONG-EARED BATS AND INDIANA BATS

DECEMBER 2016

PROPOSED BRIDGE PROJECTS

Bridge removal/replacement projects, major rehabilitation projects, or maintenance activities that make the bridge no longer suitable for roosting fall outside the scope of the FHWA/FRA/FTA Range-wide Programmatic Consultation for Indiana Bat and Northern Long-Eared Bat (FHWA Programmatic) unless an inspection/assessment for bats has been performed in accordance with the FHWA Programmatic and reveals no signs of bats.

If the assessment reveals the presence of bats roosting within the structure (and they are identified as federally protected species or not identified), or if no inspection/assessment has been completed (it is thus assumed that protected bats are roosting within the structure), additional or separate coordination with the U.S. Fish and Wildlife Service (USFWS) may be required. In these situations, the Local Agencies are recommended to consult with representatives of the USFWS early in the design phase of their projects.

If an assessment has been completed and no signs of bats were observed, the owner or their consultant can conclude “no effect” for the scope of work.

Work that will not alter the roosting potential of the bridge (i.e., preventative maintenance), may fit within the scope of the programmatic agreement even if an assessment has not been completed.

Consultation documents and implementation information for the FHWA Programmatic Agreement, including the User Guide, Project Submittal Form, and Bridge/Structure Assessment Guidelines/Form can be found at:

https://www.fws.gov/Midwest/endangered/section7/fhwa/index.html.

For federally-funded projects that fall outside the scope of the FHWA programmatic agreement, Local Agencies may engage in standard section 7 consultation with the USFWS on behalf of FHWA.

USFWS technical assistance for standard section 7 consultation can be found at:
https://www.fws.gov/midwest/endangered/section7/s7process/7a2process.html.

U.S. Fish and Wildlife Service Contact Information

For specific questions about the FHWA programmatic, bats, or bridge use, contact Matthew Ihnken at:

U.S. Fish and Wildlife Service
East Lansing Field Office
2651 Coolidge Road, Suite 101
East Lansing, MI 48823
517-351-2555 (office)
517-351-1443 (fax)
matthew_ihnken@fws.gov

Address written requests for standard section 7 consultation to Scott Hicks (Field Supervisor) at:

U.S. Fish and Wildlife Service
East Lansing Field Office
2651 Coolidge Road, Suite 101
East Lansing, MI 48823
517-351-2555 (office)
517-351-1443 (fax)

PROJECTS PROPOSING TREE REMOVAL

Local Agencies and their consultants should use the guidance documents on the following pages when contemplating tree removals and how those removals could affect federally protected bat species.

The guidance is for:

- Areas with Northern Long-Eared Bats or their potential habitats
- Areas with Indiana Bats or their potential habitats

Northern Long-Eared Bat (NLEB) Information
December 2016

Local Agency (LA) projects proposing tree removal and/or bridge work within the range of the NLEB and/or Indiana Bat may use the FHWA/FRA/FTA Range-wide Programmatic Consultation for Indiana Bat and Northern Long-Eared Bat (FHWA Programmatic) if they meet the criteria. More information on the FHWA Programmatic, including consultation documents, is at:

https://www.fws.gov/Midwest/endangered/section7/fhwa/index.html.

NLEB may use a variety of forested habitats containing trees three (3) inches in diameter or larger with cracks/crevices, cavities, and/or exfoliating bark. Projects that may affect potential habitat for the NLEB but fall outside the scope of the FHWA programmatic may engage in Standard Section 7 consultation with the USFWS.

USFWS technical assistance for Standard Section 7 consultation can be found at:
https://www.fws.gov/midwest/endangered/section7/s7process/7a2process.html.

For projects that only affect potential habitat for the NLEB, LA's have the option to download and complete the "4(d) Rule Streamlined Consultation Form" from the following web link:

https://www.fws.gov/midwest/endangered/mammals/nleb/s7.html

Completed forms should be submitted to the U.S. Fish and Wildlife Service (USFWS), using the submittal information at the bottom of this document.

Note that the 4(d) Rule Streamlined Consultation Form applies only to the NLEB. LA projects that may affect the Indiana Bat or other federally protected species require additional coordination with the USFWS (i.e., FHWA Programmatic or Standard Section 7 consultation).

Incidental take of NLEB is prohibited when it results from tree cutting activities within 0.25 mile of known hibernacula or within 150 feet of known maternity roost trees, during the months of June and July.

See https://www.fws.gov/Midwest/endangered/mammals/nleb/nhisites.html for more details and locations of Michigan townships with known NLEB roosts/hibernacula.

Contact the USFWS for more specific location information.

For projects that are not within 0.25 mile of known NLEB hibernacula or within 150 feet of known NLEB maternity roost trees and which propose cutting trees three (3) inches in diameter or larger, MDOT has developed a Frequently Used Special Provision (FUSP) that the Local Agency Program staff engineer will include in the proposal. The FUSP includes information on tree cutting when habitats for Indiana Bats and/or the Northern Long-Eared Bats are potentially present.

Following is a basic guide for complying with the 4(d) rule.

1. If hazardous tree removal is necessary to protect human life or property, incidental take of NLEB is not prohibited.

2. For other projects where the LA proposes cutting trees, the LA completes the following tasks:

    a. Verify whether the project falls within a MI township with known NLEB roosts or hibernacula, at the following link :

https://www.fws.gov/Midwest/endangered/mammals/nleb/nhisites.html

If yes, contact USFWS for more specific location information and to discuss any restrictions or requirements, then submit the "4(d) Rule Streamlined Consultation Form" if advised by USFWS. Otherwise, a separate consultation process may be required.

If no, submit the "4(d) Rule Streamlined Consultation Form" to USFWS. Contacting USFWS ahead of time is not required.

b. Using the "4(d) Rule Streamlined Consultation Form", the Service has 30 days to review the submittal. If the Service does not respond, the LA may presume its determination is informed by best available information and consider its project responsibilities under section 7(a)(2) with respect to the NLEB fulfilled. If USFWS does not concur, they will respond within 30 days of the form's receipt.

   If the LA requests and/or receives a response from USFWS, then include all cutting and work restrictions in the project documents, and keep a copy of the USFWS response in the project file.

   If no response is received within 30 days, the LA needs to note this in its project file and proceed with the scope of work as detailed/agreed upon in the "4(d) Rule Streamlined Consultation Form".

3. Even when incidental take of NLEB is exempt, the USFWS recommends avoiding the removal of potentially suitable roost trees (i.e., three (3) inches dbh or larger with cracks/crevices, cavities, and/or exfoliating bark) during the summer roosting period (April 1st through September 30th) whenever feasible. In particular, avoiding tree removal during the months of June and July, when young bats are nursing and unable to fly, will help to preclude adverse effects to the species.

Note that 4(d) Rule exemptions pertain only to the NLEB. Incidental take of Indiana Bats is prohibited throughout the species' range.

If you have additional questions, contact Mark Harrison (MDOT Local Agency Program Project Development Engineer) at (517) 373-2286, harrisonm@michigan.gov.

U.S. Fish and Wildlife Service Contact Information.

When submitting 4(d) Rule Streamlined Consultation Forms, send electronic copies of the completed forms to each of the e-mail addresses below.

eastlansing@fws.gov
jennifer_wong@fws.gov

When submitting FHWA Programmatic forms, send electronic copies of the completed forms to each of the following e-mail addresses below.

eastlansing@fws.gov
matthew_ihnken@fws.gov

Address written requests for standard section 7 consultation to Scott Hicks (Field Supervisor), at:

U.S. Fish and Wildlife Service
East Lansing Field Office
2651 Coolidge Road, Suite 101
East Lansing, MI 48823
517-351-2555 (office)
517-351-1443 (fax)

For specific questions concerning bats, tree cutting, or section 7 consultation, contact Jennifer Wong or Matthew Ihnken or at:

U.S. Fish and Wildlife Service
East Lansing Field Office
2651 Coolidge Road, Suite 101
East Lansing, MI 48823
517-351-2555 (office)
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matthew_ihnken@fws.gov
jennifer_wong@fws.gov

Indiana Bat (IB) Information
December 2016

Indiana Bats may use a variety of forested habitats containing trees at least five (5) inches in diameter or larger with cracks/crevices, and/or exfoliating bark.

For Local Agency (LA) projects that may affect potential habitat for the IB, winter tree cutting restrictions have not changed. See the map in the attached MDOT Frequently Used Special Provision (FUSP).

LA projects proposing tree removal and/or bridge work within the range of the IB may use the FHWA/FRA/FTA Range-wide Programmatic Consultation for Indiana Bat and Northern Long-Eared Bat (FHWA Programmatic) if they meet the criteria.

Information on the FHWA Programmatic, including consultation documents, is at: https://www.fws.gov/Midwest/endangered/section7/fhwa/index.html.

Completed forms should be submitted to the U.S. Fish and Wildlife Service (USFWS), using the submittal information at the bottom of this document.

Using the FHWA Programmatic, the Service has 14 days to review the submittal. If the Service does not respond within 14 days, the LA may presume its determination is informed by best available information and may consider its project responsibilities under section 7(a)(2) with respect to the Indiana Bat/NLEB as fulfilled. If USFWS does not concur, they will do so within 14 days of the form's receipt.

Projects that fall outside the scope of the FHWA programmatic may engage in standard section 7 consultation with the USFWS.

USFWS technical assistance for standard section 7 consultation is at: https://www.fws.gov/midwest/endangered/section7/s7process/7a2process.html.

Tree cutting in potentially suitable habitat for the IB must be restricted to the period of October 1st through March 31st to avoid incidental take/adverse effects to the endangered species. Tree clearing in suitable habitat between April 1st and September 30th will require additional coordination with the USFWS.

When cutting trees three (3) inches in diameter or larger, the Local Agency Program staff engineer will include the attached FUSP into the proposal. This FUSP includes information on tree cutting when IB and/or Northern Long-eared Bats are potentially present.

If you have additional questions, contact Mark Harrison (MDOT Local Agency Program Project Development Engineer) at (517) 373-2286, harrisonm@michigan.gov.

U.S. Fish and Wildlife Service Contact Information.

When submitting 4(d) Rule Streamlined Consultation Forms, send electronic copies of the completed forms to each of the e-mail addresses below.

eastlansing@fws.gov
jennifer_wong@fws.gov

When submitting FHWA Programmatic forms, send electronic copies of the completed forms to each of the following e-mail addresses below.

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MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
TREE REMOVAL

ENV:JDG 1 of 2 APPR:DMG:MJO:06-13-17
FHWA:APPR:06-14-17

a. Description. This work consists of all tree removals or clearing vegetation greater than 3 inches in diameter required for the project as defined in sections 201 and 202 of the Standard Specifications for Construction.

1. Due to the existence of federally protected species, complete all tree removals required for the project between October 1 and March 31 for all projects located in the counties shown on the map included in this special provision as having both Indiana bats (IB) and Northern Long Eared bats (NLEB).

2. In the counties shown on the map included in the special provision as having NLEB only, tree removal can be done at any time during the year.

b. Materials. None specified.

c. Construction. The work must be conducted in accordance with sections 201 and 202 of the Standard Specifications for Construction.

d. Measurement and Payment. Clearing or tree removal will be paid for according to subsections 201.04 and 202.04 of the Standard Specifications for Construction and applicable special provisions.

If the project is in a county shown on the map as having NLEB bats only, payment will be in accordance with subsections 201.04 and 202.04 of the Standard Specifications for construction.

If the project is in a county shown on the map as having both IB and NLEB the work must be conducted between October 1 and March 31. If the work is not completed within this timeframe, and additional environmental evaluation is required, the Contractor may face penalties from paying any additional costs and being assessed liquidated damages up to being held in default of the contract.


Michigan Bat Distribution Map
Legend
IB and NLEB Range
NLEB Range Only
KEWEENAW
HOUGHTON
ONTONAGON
BARAGA
GOGEBIC
MARQUETTE
ALGER
LUCE
CHIPPEWA
IRON
SCHOOLCRAFT
MACKINAC
DICKINSON
DELTA
CHARLEVOIX
EMMET
MENOMINEE
CHEBOYGAN
PRESQUE ISLE
CHARLEVOIX
LEELANAU
ANTRIM
OTSEGO
ALPENA
MONTMORENCY
LEELANAU
GRAND TRAVERSE
KALKASKA
OSCODA
ALCONA
BENZIE
CRAWFORD
WEXFORD
MISSAUKEE
OGEMAW
IOSCO
MANISTEE
ROSCOMMON
ARENAC
MASON
LAKE
OSCEOLA
CLARE
GLADWIN
HURON
BAY
OCEANA
NEWAYGO
MECOSTA
ISABELLA
MIDLAND
TUSCOLA
SANILAC
MONTCALM
GRATIOT
SAGINAW
MUSKEGON
LAPEER
KENT
GENESEE
ST. CLAIR
OTTAWA
IONIA
CLINTON
SHIAWASSEE
MACOMB
OAKLAND
ALLEGAN
BARRY
EATON
INGHAM
LIVINGSTON
VAN BUREN
KALAMAZOO
CALHOUN
JACKSON
WASHTENAW
WAYNE
MONROE
BERRIEN
CASS
ST. JOSEPH
BRANCH
HILLSDALE
LENAWEE

Figure 1

Environmental Screening for Eastern Massasauga Rattlesnake in Michigan

March 14, 2017

Background

The Eastern Massasauga Rattlesnake (EMR) is listed as a threatened species under the U.S. Endangered Species Act (Act). The Act protects the EMR and their habitat by prohibiting "take" and may require agencies to coordinate with the U.S. Fish and Wildlife Service (Service) before authorizing or funding an activity affecting the species. To streamline coordination, the Service's Michigan Ecological Services Field Office has developed a set of Best Management Practices (BMPs) for specific activities potentially impacting EMR in Michigan. These BMPs are voluntary and just one of the ways that compliance with the Act may be achieved.

Projects may…

- have no effect to EMR and no need for additional ESA compliance considerations.
- have potential for adverse effects, but use BMPs to avoid adverse effects (i.e., "not likely to adversely affect" EMR) or minimize the adverse effects.
- use surveys to confirm probable absence of EMR (contact the Service for survey guidance).
- use "Informal Consultation" with Service (for actions requiring a Federal permit or funding).
- use "Formal Consultation" with Service (for actions requiring a Federal permit or funding).
- develop a Habitat Conservation Plan and seek an ESA permit, if adverse effects cannot be avoided.

For activities not listed in the BMPs, please contact the Service for project-specific recommendations. In some cases implementation of BMPs may not be sufficient to avoid all adverse impacts to EMR and additional consultation with the Service may be required. The Service can assist planners in determining whether adverse effects are likely as a result of proposed projects, and whether implementation of BMPs is sufficient to remove the risk of adverse effects.

Additional information on compliance with the Act can be found:

For Federal actions/section 7 consultation:
https://www.fws.gov/midwest/Endangered/section7/s7process/index.html

For non-Federal actions:
https://www.fws.gov/midwest/endangered/permits/index.html

For questions or comments you may contact the Service below:
U.S. Fish and Wildlife Service
Michigan Ecological Services Field Office
2651 Coolidge Road, Suite 101
East Lansing, MI 48823
Phone: (517)351-2555
Email: eastlansing@fws.gov

Definitions

Active Season: The active season begins in the spring when snakes emerge from hibernation, generally when maximum air temperatures are above 50°F, and ends in the fall when EMR have returned to their hibernacula and temperatures are consistently below 45°F. In Michigan, the active season is generally April through October. The active season dates will vary by location and weather. **Contact the Service for project-specific dates based on location when work in EMR habitat is planned near the start or end of the active season**.

Affecting hydrology: We consider "affecting hydrology" to include projects that are likely to appreciably change the elevations of surface water upstream or downstream, or in the local ground water (as estimated pre-project vs. post-project). The concern is for changes to local hydrology (e.g., creating new ditches, creating a new impoundment) that might harm EMR hibernating at or near ground water, or actions that significantly alter available suitable habitat either through flooding or drying of EMR wetlands.

Hibernacula: Areas suitable for EMR to overwinter. For most EMR populations, the locations of hibernacula are not known, but these areas are critical to protect. Unfortunately, we lack information on how to reliably identify these areas. EMR usually hibernate below the frost line in crayfish or small mammal burrows, tree root networks or rock cervices in or along the edge of wetlands or in adjacent upland areas with presumably high water tables (areas where the soil is saturated but not inundated). Following egress from hibernacula in the spring, EMR typically remain aboveground in the vicinity for a week or two, and return to these areas in the fall for several weeks prior to entering hibernation. Surveys in the spring (shorting following egress) or fall (prior to ingress) when snakes are congregating in the vicinity may help identify these important areas. Maintaining stable hydrology of these areas is important during the inactive season.

IPaC: "Information for Planning and Conservation" is a project planning tool available on-line to the public that streamlines the Service's environmental review process.

EMR Habitat: "Eastern Massasaugas have been found in a variety of wetland habitats. Populations in southern Michigan are typically associated with open wetlands, particularly prairie fens, while those in northern Michigan are known from open wetlands and lowland coniferous forests, such as cedar swamps. Some populations of Eastern Massasaugas also utilize open uplands and/or forest openings for foraging, basking, gestation and parturition (i.e., giving birth to young). Massasauga habitats generally appear to be characterized by the following: (1) open, sunny areas intermixed with shaded areas, presumably for thermoregulation; (2) presence of the water table near the surface for hibernation; and (3) variable elevations between adjoining lowland and upland habitats." From Michigan Natural Features Inventory (Website: mnfi.anr.msu.edu)

Tier 1 Habitat: Areas known to be occupied by EMR or highly likely to be occupied by EMR.

Tier 2 Habitat: Areas with high potential habitat and may be occupied by EMR.

Within the known range: EMR can occur throughout the Lower Peninsula and on Bois Blanc Island in Mackinac County. Areas within the known range but outside of Tier 1 and Tier 2 are considered less likely to be occupied. EMR is highly secretive and cryptic in nature, and can persist in low densities, which makes them difficult to detect. Further, there are extensive areas of the state that have never been surveyed. It is likely that there are additional and yet-unknown occurrences throughout the Lower Peninsula of Michigan. Mapped habitats are subject to change based on new information identifying current Tier 1 and 2 areas as unsuitable, or based on discovery of new EMR occurrences.

EMR Environmental Screening Step-wise Process

Step 1. Determine if EMR may be present in the action area

- ✓ Determine whether the project is in potential EMR habitat using https://ecos.fws.gov/ipac
  - o You can search for your project location and define the action area by drawing a polygon or uploading a shapefile.
  - o IPaC will give you a list of species that may be present in the area you identified. If you click on the thumbnail for EMR, it will tell you if your project is within Tier 1 or Tier 2 habitat, or within the known range of EMR. If EMR is not listed, you do not need to consider this species. Effects to other listed species should also be considered; contact the Service if you need assistance.
  - o If EMR is listed, it does not necessarily mean that the entire action area is potential habitat, only that some potential habitat is within the action area entered. For large-scale (e.g., county-wide or multi-county projects) consider coordinating the Michigan Ecological Services Field Office for direct assistance.

If your project is within the known range of EMR, including Tier 1 or Tier 2 habitat, continue to step 2:

Step 2. Determine if the project has the potential to affect EMR

Projects have no effect on EMR when…

- ✓ There is no suitable EMR habitat in the project area and no potential impact off-site (e.g., water discharge into adjacent EMR habitat). If project site conditions are determined to be wholly unsuitable for EMR (e.g., project is in regularly mowed turf grass, row crop, graveled lot, existing building, or industrial site), it is not suitable EMR habitat.
- ✓ The project occurs within suitable habitat, but the action will have absolutely no effect on the habitat or EMR.
- ✓ In suitable EMR habitat, but the site is entirely unoccupied by the species. This is typically confirmed through surveys (contact the Service for more information). In some cases it may be easier to assume EMR are present and use BMPs than to conduct surveys for the species.

For projects where there is a potential for effects to EMR, continue to the section of the document as follows:

For projects with a combination of Tier 1 and Tier 2 habitat, follow the instructions for Tier 1.

Tier 1 Habitat

Tier 1: Project will not affect EMR if all of the following apply:

1. Project will not result in any changes to suitable EMR habitat quality, quantity, availability or distribution, including changes to local hydrology
2. If EMR are present in the project area, they are not likely to have any response as a result of exposure to the action or any environmental changes as a result of the action
3. Project includes all General Best Management Practices:
   a. Use wildlife-safe materials for erosion control and site restoration (see Erosion Control Resources side panel). In Tier 1 habitat, immediately eliminate use of erosion control products containing plastic mesh netting or other similar material that could entangle EMR.
   b. To increase human safety and awareness of EMR, those implementing the project should first watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at https://youtu.be/-PFnXe_e02w), or review the EMR factsheet (available at https://www.fws.gov/midwest/endangered/reptiles/eama/pdf/EMRfactsheetSept2016.pdf or by calling 517-351-2555.
   c. Require reporting of any EMR observations, or observation of any other listed threatened or endangered species, during project implementation to the Service within 24 hours.

Tier 1: Project Not Affecting EMR Coordination Recommendation: No pre-project coordination with Service needed. Document the steps above for your records.

Tier 1: All Other Projects: For any other projects in Tier 1 habitat that may affect EMR or its habitat, contact the Service for assistance in evaluating potential impacts. Best Management Practices (starting on page 8) are included for many actions to help with project planning, but may not be sufficient to avoid all adverse impacts. The Service can determine whether additional measures are necessary after a project-specific review.

Erosion Control Resources

There are a variety of products that can be used for soil erosion and control requirements. These products may incorporate plastic mesh netting to help maintain form and function. This plastic netting has been demonstrated to entangle a wide variety of wildlife from birds to small mammals. In Michigan, soil erosion control netting has resulted in the documented mortality of a number of imperiled amphibian and reptile species including the EMR and the Eastern Fox Snake (State Threatened).

Several products for soil erosion and control exist that do not contain plastic netting including net-less erosion control blankets (for example, made of excelsior), loose mulch, hydraulic mulch, soil binders, unreinforced silt fences, and straw bales. Others are made from natural fibers (such as jute) and loosely woven together in a manner that allows wildlife to wiggle free. For more information regarding wildlife-safe erosion control measures contact the USFWS Michigan Ecological Services Field Office.

Tier 2 Habitat

Tier 2: Project is not likely to adversely affect EMR if all of the following apply:

1. Project does not impact more than 1 acre of wetland habitat and includes all applicable activity-specific BMPs (starting on page 8), and
2. Project will not appreciably affect hydrology
3. Project includes all General Best Management Practices:
    a. Use wildlife-safe materials for erosion control and site restoration (See Erosion Control Resources side panel, page 4). In Tier 2 habitat, eliminate the use of erosion control products containing plastic mesh netting or other similar material that could ensnare EMR as soon as is feasible but no later than January 1, 2018.
    b. To increase human safety and awareness of EMR, those implementing the project should first watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at https://youtu.be/-PFnXe_e02w), or review the EMR factsheet (available at https://www.fws.gov/midwest/endangered/reptiles/eama/pdf/EMRfactsheetSept2016.pdf or by calling 517-351-2555.
    c. Require reporting of any EMR observations, or observation of any other listed threatened or endangered species, during project implementation to the Service within 24 hours.

Tier 2: Project Not Likely to Adversely Affect EMR Coordination Recommendation: Informal consultation with Service for actions requiring a Federal permit or funding. For non-Federal projects, document the steps above for your records, but no pre-project coordination with the Service needed.

Tier 2: All Other Projects: Coordinate with the Service for a project-level review to determine potential impacts and whether additional conservation measures are needed to avoid adverse effects.

Within the known range of EMR

For projects within the known range of EMR, but outside of Tier 1 and Tier 2 habitat:

To help ensure your project is unlikely to affect EMR:

1. Project applies the General Best Management Practices:
    a. Use wildlife-safe materials for erosion control and site restoration (See Erosion Control Resources side panel, page 4). By January 1, 2019, eliminate the use of erosion control products containing plastic mesh netting or other similar material that could ensnare EMR (within the known range but outside of Tier1 or Tier 2 habitat).
    b. To increase human safety and awareness of EMR, those implementing the project should first watch MDNR's "60-Second Snakes: The Eastern Massasauga Rattlesnake" video (available at https://youtu.be/-PFnXe_e02w), or review the EMR factsheet (available at https://www.fws.gov/midwest/endangered/reptiles/eama/pdf/EMRfactsheetSept2016.pdf or by calling 517-351-2555.
    c. Require reporting of any EMR observations, or observation of any other listed threatened or endangered species, during project implementation to the Service within 24 hours.
2. Project will not have significant impacts to dispersal, connectivity, or hydrology of existing EMR potential habitat, i.e., filling less than 1 acre of wetland habitat or converting less than 20 acres of uplands of potential EMR habitat (uplands associated with high quality wetland habitat) to other land uses.

Within the Known Range, but Outside Tier 1 or 2 Coordination Recommendation:
Document the steps above for your records and no pre-project coordination with the Service needed. If you cannot implement the General Best Management Practices contact the Service for assistance in evaluating potential impacts.

Activity-Specific Best Management Practices

For Tier 1, BMPs are included; however, even with implementation of the BMPs, project-specific review may be needed to determine whether they are sufficient to avoid all adverse impacts

- In Tier 1 habitat, contact the Service regarding the potential applicability of surveys to determine EMR absence in suitable habitat. In Tier 2, surveys can be conducted to confirm the presence of suitable habitat and/or the presence/probable absence of EMR. If onsite habitat is determined to be wholly unsuitable via desktop analysis (e.g., entirely mowed lawn, row crop, graveled lot, and industrial site), then it can be classified as unoccupied and the BMPs will not be necessary.
- Minimize work in Tier 1 and Tier 2 EMR habitat. When feasible, do not route new construction projects, such as pipelines, facilities, or access roads, through potential EMR habitat. Implement the use of wildlife-friendly corridors (e.g., oversized culverts) into new road design to maintain or enhance habitat connectivity.
- Projects should be designed to minimize the potential for disturbance to EMR during project activities.

Maintenance Activities (includes nominal modifications to existing roads and infrastructure)

1. Ground Disturbing Activities
    a. All
        i. No known EMR hibernacula are destroyed or disturbed at any time of year. Because these areas are often not known:
            1. For Tier 1: contact the Service to determine whether adverse impacts are likely as a result of ground disturbing work in Tier 1 habitat.
            2. For Tier 2: when operating in potential hibernation areas (e.g., EMR wetlands and adjacent areas with crayfish burrows, rodent holes, small mammal burrows, etc.), work is conducted well within the active season (June – August) to avoid when snakes are likely to be present. During this time, they are most likely to be able to move out of the way of disturbance and have greater chances to find alternative hibernation sites. Destroying potential hibernacula may still impact snakes indirectly. Potential hibernation areas should be avoided to the extent possible.
    b. Grading
        i. When working during EMR active season, use exclusionary fencing to separate EMR habitat from the work site to prevent EMR from accessing the disturbance area. For example, in linear projects exclusionary fencing should run parallel to the disturbance, creating a barrier to snake movement. Each end of the exclusionary fencing should be angled away from the area of disturbance to direct snakes traveling along fencing away from the site. The

exclusionary fencing will typically be traditional silt fence that is set up outside of all areas of disturbance and other types of fencing (i.e., snow fence used to delineate the work zone). Do not use fencing materials that can entangle or injure snakes.

ii. Any areas using exclusionary fencing should first be "cleared" by a qualified individual[1] before beginning construction activities. Fencing should be installed a minimum of 1 day before construction activities occur and walked weekly to ensure the integrity of the fence. If snakes are seen within the work zone, activity should stop until the snake can be safely moved, and the fence examined for breeches.

iii. Revegetate all disturbed Tier 1 and Tier 2 habitat with appropriate plant species (i.e., native species or other suitable non-invasive species present on site prior to disturbance). Monitor all restoration plantings for proper establishment and implement supplemental plantings as necessary to ensure restorations are of equal to or better habitat quality than previous conditions.

iv. In Tier 1 and Tier 2, avoid spread of invasive species into EMR habitat by following best practices. This includes inspecting and cleaning equipment and vehicles between work sites as needed to avoid the spread of invasive plant materials.

c. Trenching

i. In Tier 1 and Tier 2, avoid trenching in EMR wetlands when possible. In Tier 1, if open trenching is required install exclusionary fencing (follow measures 1(b)(i)-(iv)) and ensure the area is clear prior to trenching.

d. Fill

i. In Tier 1 and Tier 2, ensure all imported fill material is free from contaminants or invasive species could affect the species or habitat through acquisition of materials at an appropriate quarry or other such measures.

ii. In Tier 1 and Tier 2, use exclusionary fencing around the area to be filled and have the site "cleared" prior to placing fill by a qualified individual (as in 1(b)(i)-(ii).

e. Ditching

i. For Tier 1 and Tier 2, conduct work well within the active season (June-August) when snakes are not likely to be near hibernation sites and can escape disturbance, or contact Service for project specific recommendations.

ii. For Tier 1, use exclusionary fencing around the area to be cleared/graded and have the site cleared by a qualified individual prior to construction activities.

iii. For Tier 1, contact the Service for work greater than 200' for project specific recommendations.

[1] A qualified individual is someone who has received training on the identification and life history of EMR.

2. Site Access with vehicles (both Tiers)
    a. Limit operating vehicles/equipment, clearing trees, etc., in EMR habitat to the inactive season when the ground is frozen. During this time, under these conditions, EMR are most likely underground and will not be impacted by these activities. When possible, use low-impact equipment such as light weight track mounted vehicles with low ground pressure. In Tier 1, if the ground isn't completely frozen (due to weather conditions during the inactive season or if working near seeps and springs that are less likely to freeze), or if working near potential hibernacula, manual access (on foot) may be required.
    b. Strictly control and minimize vehicle activity in known/presumed occupied EMR habitat to the extent possible. During EMR active season, speed limits at facilities and access roads (i.e., 2-track and gravel) in occupied habitat should be <15 MPH.
    c. In Tier 1 and Tier 2 habitat areas, drivers should be aware of the potential danger to the driver of swerving to intentionally drive over snakes as well as legal and conservation implications.

3. Heavy Equipment (both Tiers)
    a. Spill Prevention for oils/fluids
        i. Site staging areas for equipment, fuel, materials, and personnel at least 100 feet from the waterway, if available, to reduce the potential for sediment and hazardous spills entering the waterway. If sufficient space is not available, a shorter distance can be used with additional control measures (e.g., redundant spill containment structures, on-site staging of spill containment/clean-up equipment and materials). If a reportable spill has impacted occupied habitat:
            1. Follow spill response plan;
            2. Call MDEQ and the National Response Center (800-424-8802), and the Service's Michigan Ecological Services Field Office (517-351-2555) to report the release.
    b. Do not use large equipment or perform earth-moving activities, water withdrawal and discharge for hydrostatic testing, or other activities that substantially affect the ground or water levels in potential EMR hibernacula areas. Avoidance measures may include, but are not limited to, re-routing of pipeline and appurtenance facilities, boring or drilling, and timing/weather-related restrictions. Measures will be determined on a site-specific basis, based on local habitat conditions, contact Service for more information.

4. Hydrology impacts (both Tiers)
        i. Water levels in known/presumed occupied habitats should not be artificially manipulated during the inactive season.

ii. Where applicable, water levels should be allowed to flow naturally and not be artificially stabilized. This allows for the restoration of early successional habitats.

Habitat Management and Restoration

5. Vegetation Management
    a. Mowing
        i. In Tier 1, mow during the inactive season.
        ii. For Tier 2, mowing is unrestricted during the inactive season. During the active season, follow daytime mowing restrictions and mow during times of day when snakes are less likely to be active (Figure 1). Increase mower deck height to >8 inches to reduce likelihood of injury to snakes. Higher deck height will reduce the risk of death or injury to snakes in the area.
        iii. In areas with turf grass or areas where trying to discourage EMR (e.g., in areas around buildings), mow regularly and keep grass relatively short (less than 4-6 inches) to reduce its suitability for EMR. If starting with longer grass (greater than 6 inches), mow during the inactive season initially, and then maintenance mowing can occur during the active season (as long as it is regularly maintained and kept shorter than 4-6 inches, so that EMR is unlikely to use those areas). Unmaintained/longer grass may be used by snakes and make them vulnerable to mortality during the next mowing event.

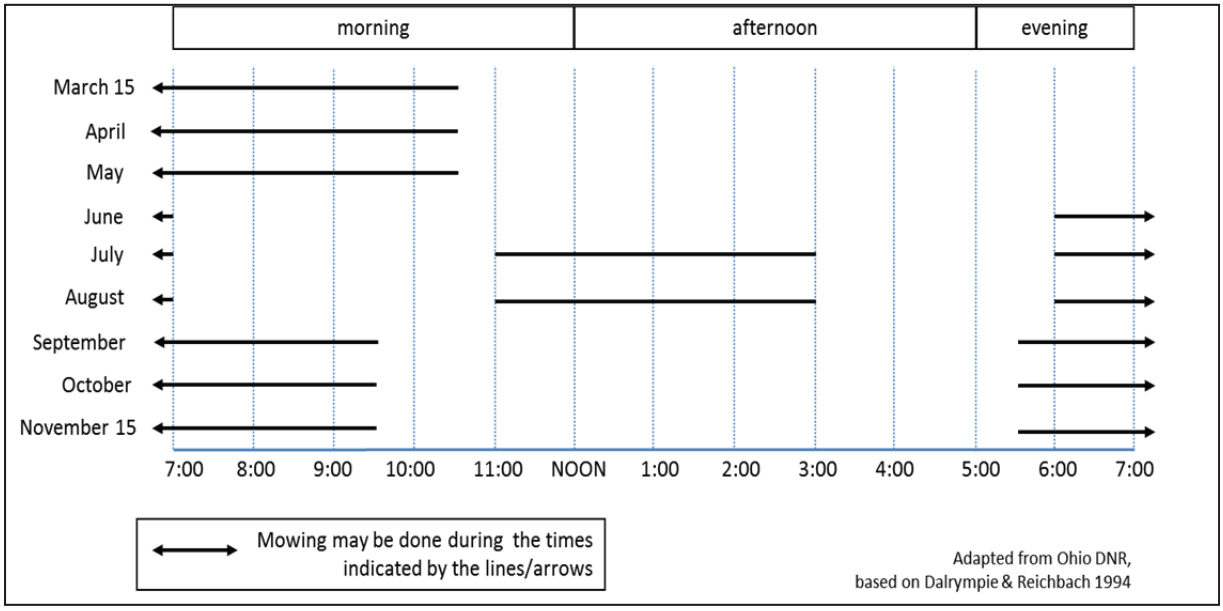


Figure 1. EMR Active season mowing schedule (NiSource Biological Opinion, page 273, USFWS 2015)

b. Cultivation (e.g., disking)
    i. In Tier 1 habitat, disking should be limited to the inactive season, and areas within 50 m of known or potential hibernacula should be avoided. In Tier 2, disking can occur in the active season if area is mowed during the inactive season and maintained shorter than 4-5 inches.
c. Brush/Tree Removal
    i. In Tier 1, conduct brush or tree removal in known/presumed EMR habitat during the inactive season, when the ground is frozen (such that soils can be left undisturbed).
    ii. Use low impact harvest methods in Tier 1 and Tier 2 wetlands to cut and remove individual trees. This includes using low-impact equipment such as light weight track mounted vehicles with low ground pressure. In Tier 1, if the ground isn't completely frozen (due to weather conditions during the inactive season or if working near seeps and springs that are less likely to freeze), or if working near potential hibernacula, use hand tools and access site on foot.
    iii. In Tier 1 and Tier 2, do not burn brush piles during the active season. Dispose of brush offsite or leave in place.
d. Herbicides
    i. Follow all appropriate label instructions regarding which herbicide formulation to use in potential EMR habitat. Avoid spray drift beyond the target species/area (observing label instructions regarding optimal wind speed and direction, boom height, droplet size calibration, precipitation forecast, etc.).
    ii. Avoid broadcast applications of herbicides in Tier 1. Spot spraying or wicking can be used to control invasive plants in occupied habitat. If using broadcast spray in Tier 2, limit the area of exposure to less than half of the available EMR habitat to allow for untreated areas to provide potential areas of refugia from exposure. Contact the Service if you need help in determining this.
e. Prescribed burning (Tier 1 and Tier 2)
    i. Conduct prescribed burns during the inactive season before snakes emerge from hibernation. Walk the burn unit following the burn and report any dead or injured EMR to the Service within 24 hours. Burn only a portion (e.g., one-third) of available EMR habitat in any year to leave suitable cover for EMR and its prey.
    ii. Establish fire breaks using existing fuel breaks (roads, rivers, trails, etc.) to the greatest extent possible. Cultivation (disking or roto-tilling) of burn breaks will be minimized to the extent that human health and safety are not jeopardized. Cultivation and mowing to establish fire breaks will occur during the inactive season.

6. Erosion control
    a. Use wildlife-safe erosion control blankets (without plastic mesh netting in the layers of material) as required in the general BMPs. Remove all silt fence used for erosion control once soils are stable to reduce barriers to EMR movement.
7. Revegetation
    a. Revegetate all disturbed Tier 1 and Tier 2 habitat with appropriate plant species (i.e., native species or other suitable non-invasive species present on site prior to disturbance). Monitor all restoration plantings for proper establishment and implement supplemental plantings as necessary to ensure restorations are of equal to or better habitat quality than previous conditions.
8. Invasive species
    a. In Tier 1 and Tier 2, avoid spread of invasive species into EMR habitat by following best practices. This includes inspecting and cleaning equipment and vehicles between work sites as needed to avoid the spread of invasive plant materials.
9. Wetland restoration
    a. Restoring natural hydrology in areas that have been drained by tiling and ditching may greatly benefit EMR habitat. Conduct tile breaking or excavation well within the active season to avoid potential hibernacula. Have a qualified person walk in front of the equipment to clear the area. Work with the Service for Tier 1 habitat to ensure no indirect adverse effects are expected as a result of restoration efforts.
10. Water-level manipulation
    a. Water levels should not be artificially manipulated during the inactive season to avoid impacts to hibernating snakes. Contact the Service in Tier 1 habitat when water levels will be manipulated during the inactive season or will result in significant alterations to EMR habitat during the active season.

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
EASTERN MASSASAUGA RATTLESNAKE

ENV:JDG 1 of 2 APPR:DS:MO:05-02-17
FHWA:APPR:05-04-17

a. Description. Contractors are advised that the project area has a known population of the Eastern Massasauga Rattlesnake or contains suitable habitat. This species is listed as federally threatened under the U. S. Endangered Species Act of 1973 (Act). Taking (killing, harming, or disturbing in any manner) of Eastern Massasauga Rattlesnake without a federal permit from the U.S. Fish and Wildlife Service is prohibited under federal law. The Act provides enforcement authority to the U.S. Fish and Wildlife Service and contains severe penalties for violations. The Contractor is liable to the Department for any penalties imposed for violations to the Act due to the Contractor's failure to comply with this special provision. Fines and penalties range up to $50,000 and 1 year in prison. Violation of any requirement listed below can lead to an immediate work stoppage in Eastern Massasauga Rattlesnake habitat. FHWA is required under federal law to assure MDOT is compliant with these provisions or risk losing federal funding for the project. This special provision addresses education, notification and intentional take requirements of the Contractor and their workers to protect the Eastern Massasauga Rattlesnake as required under the Act.

b. Materials. None specified.

c. Construction. Adhere to the following requirements:

1. Prior to construction, all Contractor staff working onsite must read the attached fact sheet (2 of 2). The purpose of the fact sheet is to provide the Contractor easy identification tips, notification that a venomous snake may be onsite, and raise awareness regarding its protected legal status.

2. Any possible Eastern Massasauga Rattlesnake sightings must be immediately reported to the Engineer.

3. Intentionally 'take' meaning: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

d. Measurement and Payment. All costs associated with complying with this special provision will not be paid for separately but will be considered to have been included with other items of work.

Eastern Massasauga Rattlesnake (*Sistrurus catenatus*)

Protected as federally threatened

Photos courtesy of the Michigan Department of Natural Resources and Michigan State University

This species is suspected to occur at or near the work site. Please have staff read the following information.

What Does an Eastern Massasauga Rattlesnake Look Like?

The eastern massasauga rattlesnake is a thick-bodied and short venomous snake. Adults typically measure 18 to 30 inches long. This species is gray to grayish-brown with dark blotches bordered by white down the middle of its back. The head is thick and triangular and has an obvious neck. Like many venomous snakes, the massasauga has vertical slitted pupils like a cat and heat sensing pits below the eyes. A rattle is present on the tail that "buzzes" as a warning signal, although they may strike without rattling. This is the only rattlesnake in Michigan.

Where Does It Live?

These snakes prefer wet areas, such as marshes, wet prairies, wet woods, and along rivers and lakes. They also use adjacent upland during parts of the year, especially in the summer. They hibernate during the winter in crayfish burrows, under logs and tree roots, and in small mammal burrows.

What Should You Do If You See a Massasauga Rattlesnake?

Massasaugas are shy and try to avoid confrontation but that does not mean they won't bite to protect themselves. Never try to handle, chase, provoke, or threaten a snake. When in potential snake habitat, wear thick boots that cover your ankles, long pants, and do not reach into thickets or under logs. If you hear the buzzing of a rattle stay calm and back away from the sound slowly. The snake will leave if you give it space.

If an eastern massasauga rattlesnake is found at a Michigan Department of Transportation (MDOT) project, the construction engineer should be contacted immediately.

How is the Massasauga Protected Under the Law?

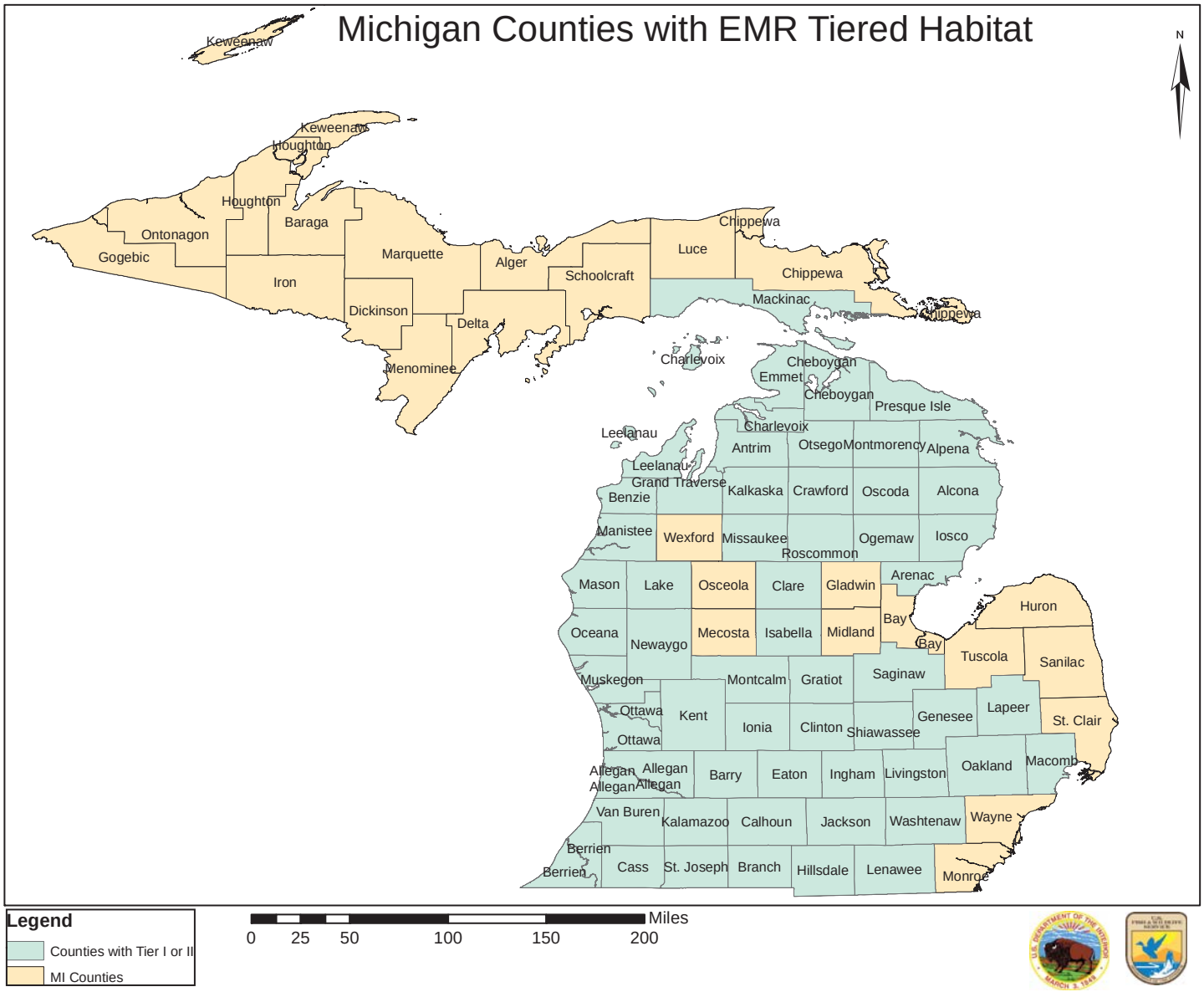
The eastern massasauga rattlesnake is protected under federal law by the Endangered Species Act. This status prohibits harming or harassing the species along with policies to protect the species habitat.

For More Information:

60-Second Snakes: The Eastern Massasauga Rattlesnake
www.youtube.com/watch?v=-PFnXe_e02w

Photos
http://animaldiversity.org/site/accounts/pictures/Sistrurus_catenatus.html

General Information
http://mnfi.anr.msu.edu/emr


Michigan Counties with EMR Tiered Habitat
N
Keweenaw
Houghton
Baraga
Ontonagon
Gogebic
Marquette
Alger
Schoolcraft
Luce
Chippewa
Iron
Dickinson
Delta
Menominee
Mackinac
Charlevoix
Cheboygan
Emmet
Presque Isle
Leelanau
Antrim
Otsego
Montmorency
Alpena
Grand Traverse
Benzie
Kalkaska
Crawford
Oscoda
Alcona
Manistee
Wexford
Missaukee
Roscommon
Iosco
Arenac
Mason
Lake
Osceola
Clare
Gladwin
Bay
Huron
Oceana
Newaygo
Mecosta
Isabella
Midland
Tuscola
Sanilac
Muskegon
Montcalm
Gratiot
Saginaw
Ottawa
Kent
Ionia
Clinton
Shiawassee
Genesee
Lapeer
St. Clair
Allegan
Barry
Eaton
Ingham
Livingston
Oakland
Macomb
Van Buren
Kalamazoo
Calhoun
Jackson
Washtenaw
Wayne
Berrien
Cass
St. Joseph
Branch
Hillsdale
Lenawee
Monroe
Legend
Counties with Tier I or II
MI Counties
Miles
0
25
50
100
150
200

Attachment
B

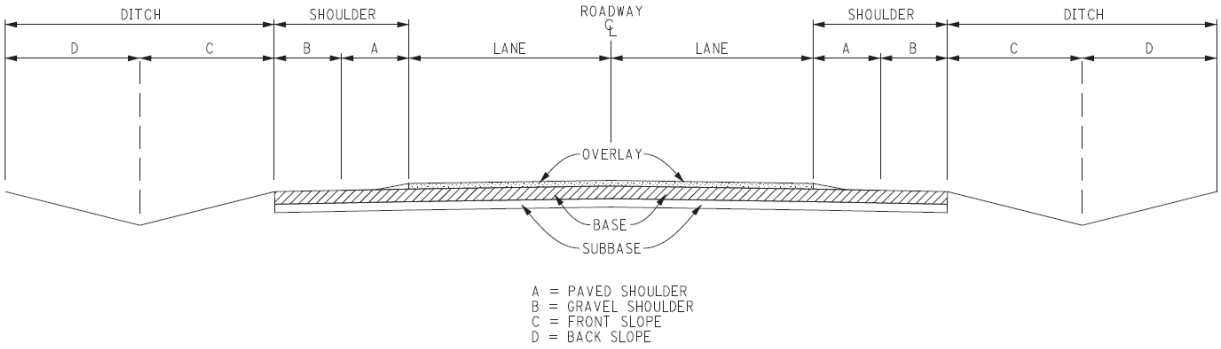
Exempt Work Types

The following work types will have no effect on state or federally listed threatened or endangered species.

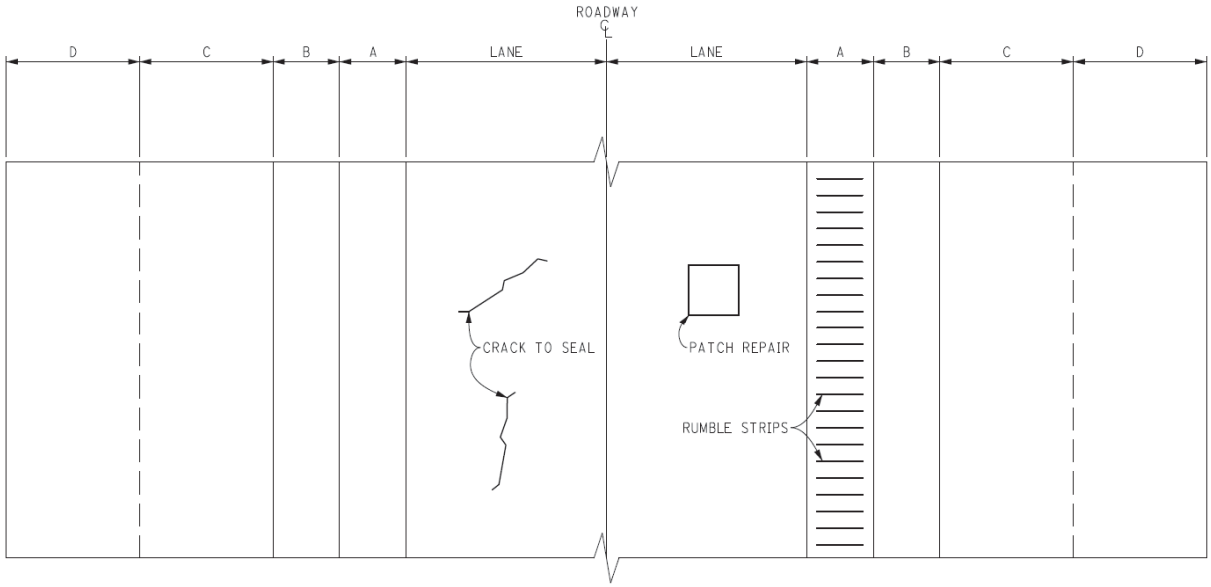
These projects are exempt from further review because they occur between existing shoulders or represent in-kind replacement of existing infrastructure with no impacts to the natural environment and therefore there would be no effect to any listed species. In addition, no equipment, vehicles, staging, spoil piles or other project related activities will occur outside the existing road shoulders.

If a project combines work types and not all are listed, then it can NOT be exempt at this stage and further analysis is required.

ROAD



ELEVATION VIEW



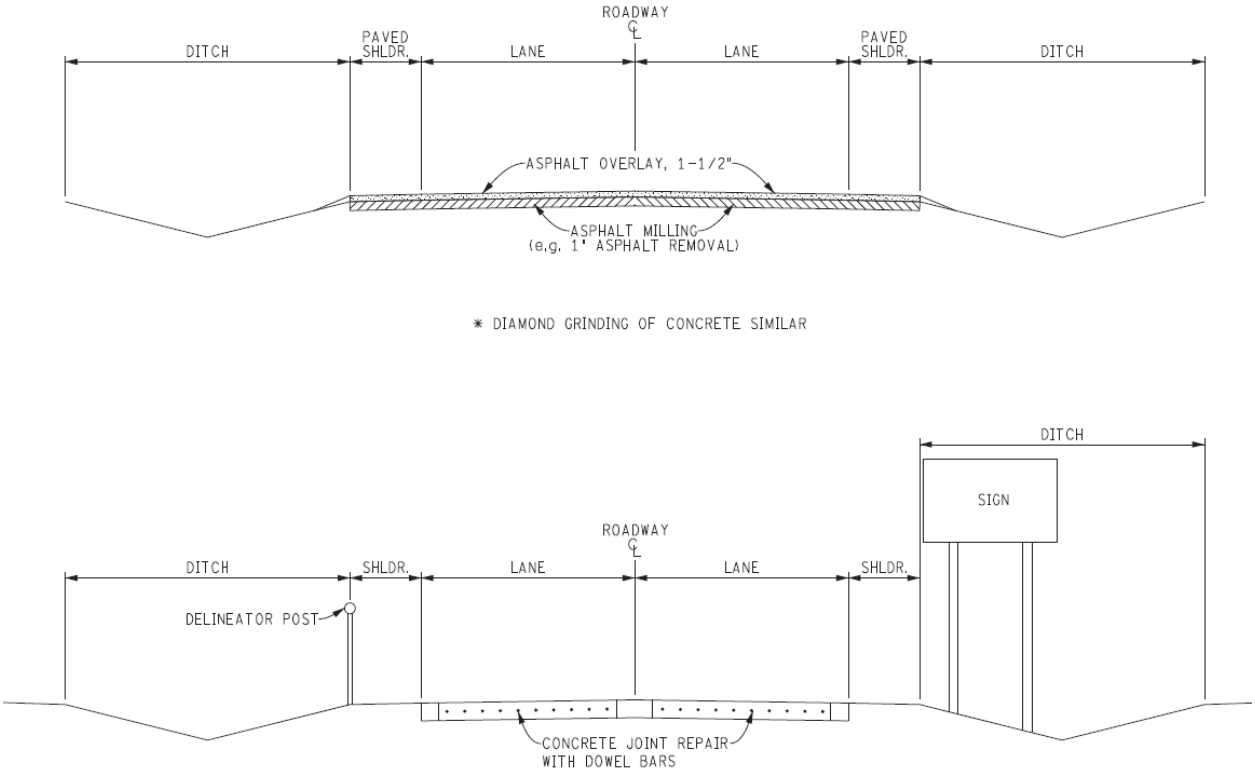
PLAN VIEW

Shoulder Work (does not include any widening)

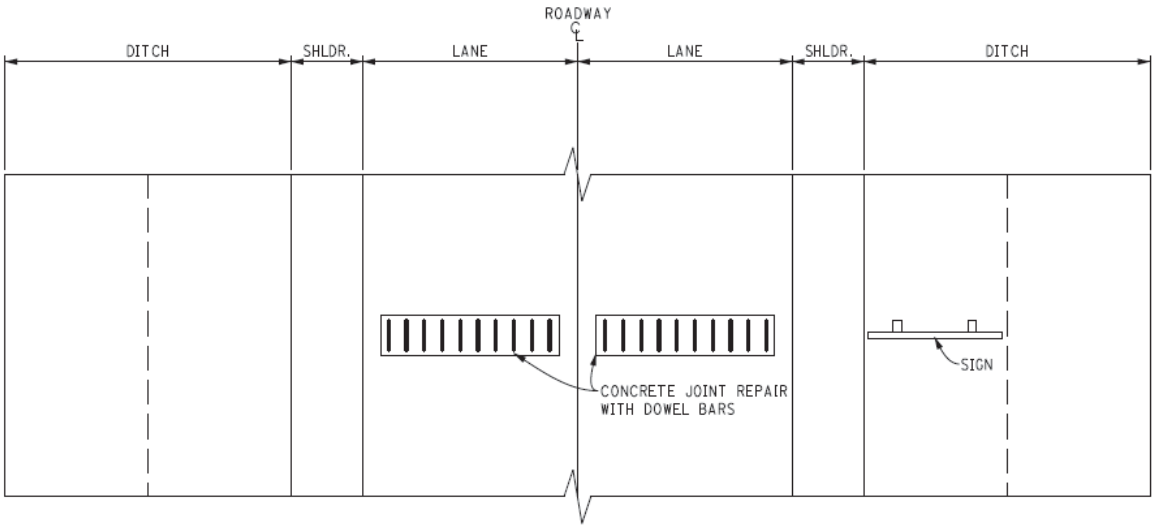
Aggregate base and shoulder material (sand or gravel) placed or regraded
Shoulder trenching - trench excavated (material is not wasted outside the shoulders) and new material placed/compacted in trench

Asphalt/HMA Work (shoulder to shoulder)

Asphalt shoulders (no widening) – paving shoulders with an asphalt/aggregate mix
Asphalt crack treatment/filling – filling cracks in existing asphalt pavement
Asphalt chipseal with pulverized stove (single or double course) – liquid asphalt base sprayed, aggregate spread on top, rolled and swept – material is not wasted outside of the shoulders
Asphalt resurfacing (slurry, micro or multi course) - paving over top of an existing pavement with asphalt/aggregate mix
Asphalt overlay (single, multi course, unbonded or ultra-thin) paving over top of an existing pavement with asphalt/aggregate mix
Asphalt overlay on composite pavement - paving over top of an existing pavement with asphalt/aggregate mix
Asphalt milling, pulverize, regrade and repave - milling off existing pavement (material is not wasted outside of shoulders), regrading, compacting and paving over top with an asphalt/aggregate mix



CONCRETE ROAD - ELEVATION VIEW

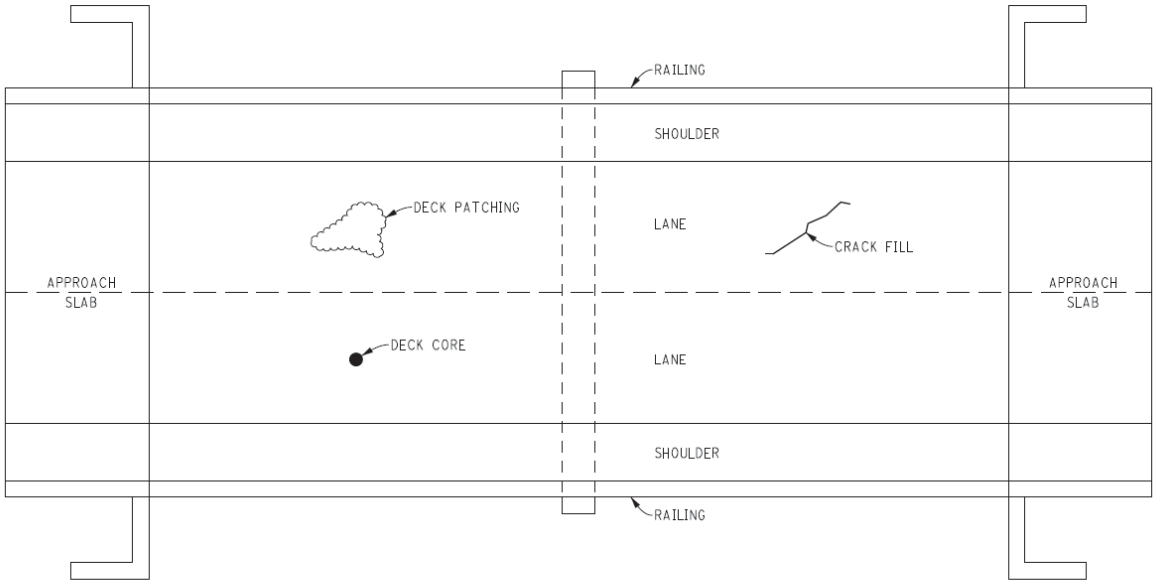


CONCRETE ROAD – PLAN VIEW

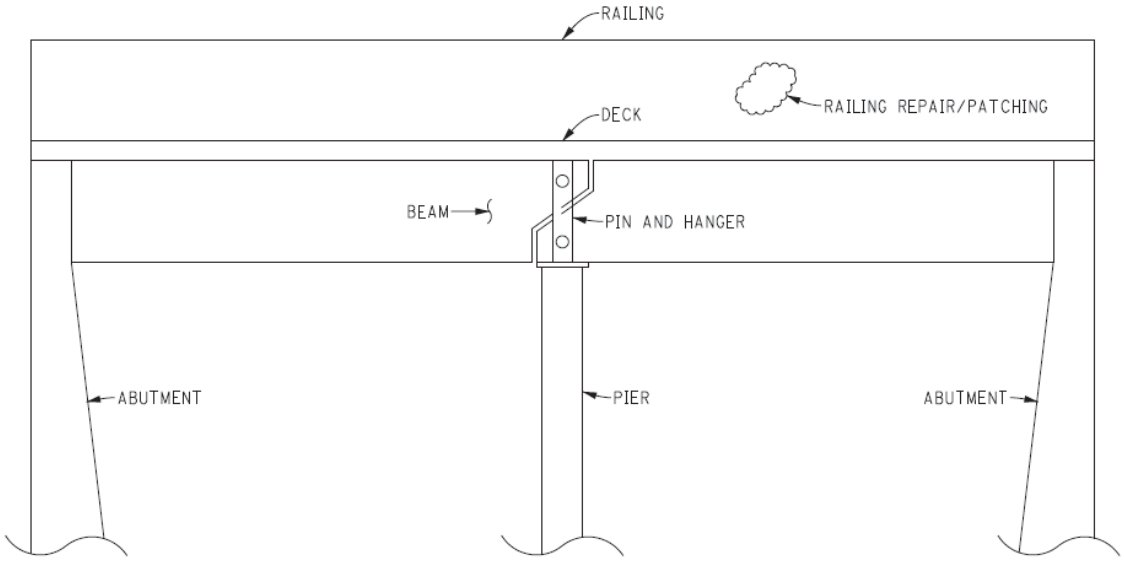
Concrete Work (shoulder to shoulder)

Concrete shoulders (no widening) – forming and pouring concrete shoulders
Concrete joint reseal, spall repair, crack seal – saw cutting out bad joints/areas and re-pouring concrete or filling cracks with liquid asphalt mix
Concrete pavement inlay or overlay - forming and pouring new concrete
Concrete pavement repair or restoration - saw cutting/removing bad areas and re-pouring concrete
Concrete pavement rubble-ize, regrade and repave – existing concrete is crushed, may be mixed with new aggregate, regraded and new pavement placed on top
Diamond grinding on concrete pavement - grinding to restore original profile or increase traction
Dowel bar retrofit - cuts made into existing concrete across faulted joints, dowel bars are inserted and covered with epoxy
Concrete patch repair or full depth repair, no widening - saw cutting out bad joints/areas and re-pouring concrete or filling cracks with liquid asphalt mix
Sidewalk replacement – remove and replace existing sidewalk, in kind
Sidewalk ramp replacement – remove and replace existing sidewalk ramp, in kind

BRIDGE



PLAN VIEW

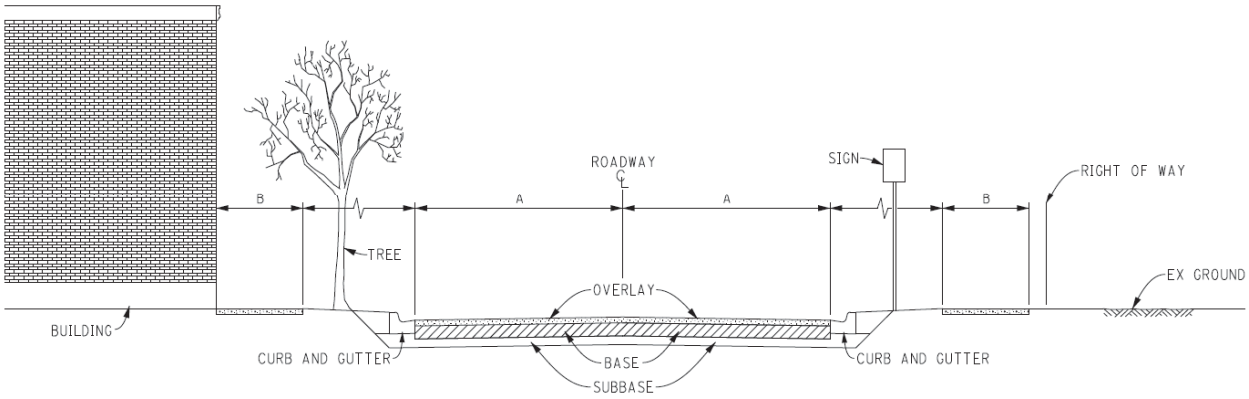


ELEVATION VIEW

Bridge Work

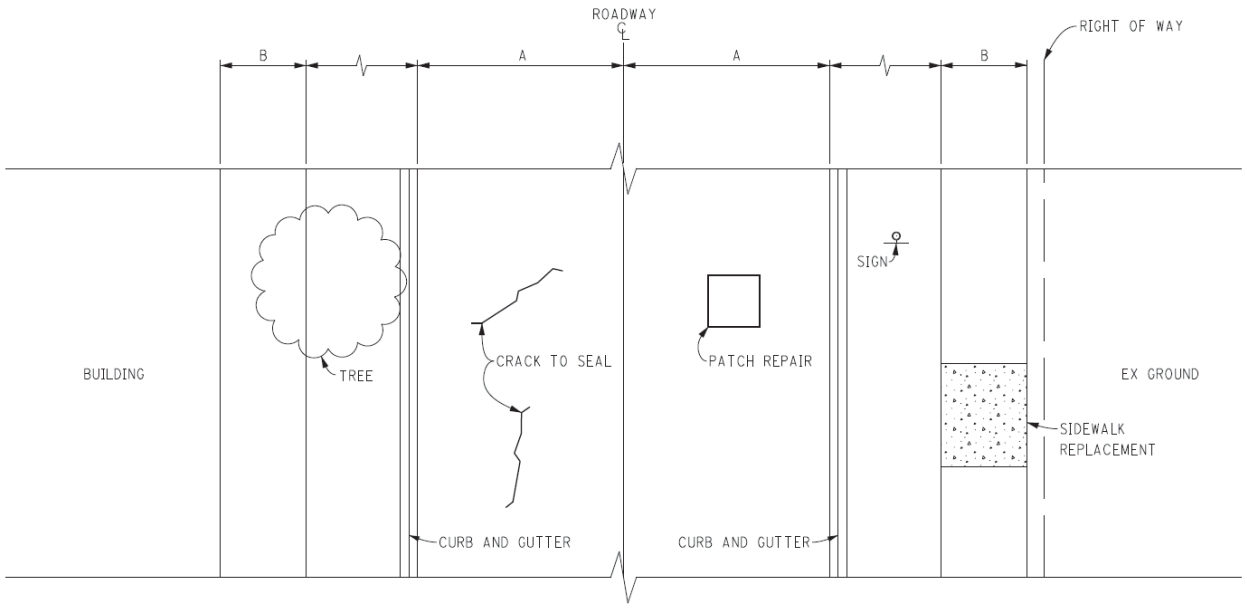
Approach work confined to within existing shoulders (pavement work between shoulders)
Deck repairs (i.e. crack fill, overlays, patching, resurfacing, etc...) – maintenance type work to bridge deck only
Pin and hanger replacement of the bridge link plates and pin assemblies at expansion joints
Deck cores – coring and re-pouring concrete on bridge deck
Railing repairs or replacement (not extensions)

ROAD
(WITH CURB AND GUTTER)



A = LANE W/WO BICYCLE LANE
B = SIDEWALK

ELEVATION VIEW



PLAN VIEW

Miscellaneous Work

Curb and gutter at intersections (replacement, not new)
Pavement markings
Fog seals
High Friction Surface or other surface seals - liquid base applied (may be sprayed), aggregate spread on top, rolled and swept
Rumble strips – ground in (material is not wasted outside the shoulders)
Underdrain clean out

Signing (including delineators) – post holes are augered (possible poured foundation) or directly driven (operations are to be completed from roadway and/or shoulder only)
Signal installation or maintenance - no earth disturbance, mowing, or vegetation removal
Lighting installation or maintenance - no earth disturbance, mowing, or vegetation removal
Maintenance of existing dynamic message boards and weather stations - no earth disturbance, mowing, or vegetation removal

RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

December 13, 2017

Mr. Russell L. Jorgenson, P.E.
Division Administrator
Federal Highway Administration, Michigan Division
315 West Allegan Street, Room 201
Lansing, Michigan 48933

Dear Mr. Jorgenson:

Local Agency Threatened and Endangered Species Review Process

The Michigan Department of Transportation requests the Federal Highway Administration review the enclosed subject Review Process and concur with the United States Fish and Wildlife Service (USFWS).

The USFWS concurred with the process on August 31, 2017, and agrees it includes the necessary steps to facilitate compliance by the local agencies with the Endangered Species Act. Concurrence was also provided by the Michigan Department of Natural Resources on November 1, 2017, and the Michigan Department of Environmental Quality on November 9, 2017.

If you have any questions, please contact either me or Bradley C. Wieferich, Bureau of Development Director, at 517-241-3998 or WieferichB@michigan.gov.

Sincerely,

Kirk T. Steudle
Director

Enclosures

cc: Theodore Burch, FHWA
Mark Lewis, FHWA
Patrick Marchman, FHWA
Kurt Zachary, FHWA
Mark Van Port Fleet
Bradley Wieferich
Matthew DeLong
Harold Zweng
Tracie Leix
Margaret Barondess
Lynnette Firman
Executive File